

IN THE CLAIMS

The text of the pending claims is provided below for the Examiner's convenience.

1. (Previously Presented) An information processing apparatus comprising:

a code reception unit adapted to receive a personal identification code, the personal identification code being input by a user of the information processing apparatus via an operation unit;

a random number generation unit adapted to generate a random number;

a code conversion unit adapted to convert the received personal identification code by using a predetermined function;

a random number encryption unit adapted to encrypt the random number generated by said random number generation unit, by using the personal identification code or the converted personal identification code as an encryption key;

a print data encryption unit adapted to encrypt print data by using the random number as an encryption key; and

a transmission unit adapted to transmit the encrypted random number, the converted personal identification code and the encrypted print data to a print control apparatus which is connected to the information processing apparatus via a network.

2. (Original) An information processing apparatus according to Claim 1, wherein said code conversion unit converts the personal identification code by using a one-way function.

3. (Original) An information processing apparatus according to Claim 2, wherein said code conversion unit generates a hash value of the personal identification code.

4. (Canceled)

5. (Withdrawn) A print control apparatus comprising:

a reception unit adapted to receive an encrypted random number, a first personal identification code subjected to predetermined conversion, and encrypted print data;

a code reception unit adapted to receive a second personal identification code input by a user;

a code conversion unit adapted to convert the received second personal identification code by using a predetermined function;

a judgment unit adapted to judge whether or not the converted first personal identification code is the same as the converted second personal identification code;

a random number decryption unit adapted to, in a case where the converted first and second personal identification codes are the same, decrypt the encrypted random number by using the second personal identification code or a key based on the second personal identification code as a decryption key; and

a print data decryption unit adapted to, in the case where the converted first and second personal identification codes are the same, decrypt the encrypted print data by using the decrypted random number as a decryption key.

6. (Withdrawn) A print control apparatus according to Claim 5, wherein said code conversion unit converts the second personal identification code by using a one-way function.

7. (Withdrawn) A print control apparatus according to Claim 6, wherein said code conversion unit generates a hash value of the second personal identification code.

8. (Withdrawn) A print control apparatus according to Claim 5, further comprising a print processing unit adapted to execute a print process of the decrypted print data.

9. (Previously Presented) A print control system which includes an information processing apparatus and a print control apparatus, wherein

said information processing apparatus comprises:

a first code reception unit adapted to receive a first personal identification code, the first personal identification code being input by a user of the information processing apparatus via a first operation unit;

a random number generation unit adapted to generate a random number;

a code conversion unit adapted to convert the received first personal identification code by using a predetermined function;

a random number encryption unit adapted to encrypt the generated random number by using the first personal identification code or the first converted personal identification code as an encryption key;

a print data encryption unit adapted to encrypt print data by using the random number as an encryption key; and

a transmission unit adapted to transmit the encrypted random number, the converted first personal identification code and the encrypted print data to said print control apparatus, and

said print control apparatus comprises:

a reception unit adapted to receive the encrypted random number, the converted first personal identification code and the encrypted print data from said information processing apparatus;

a second code reception unit adapted to receive a second personal identification code, the second personal identification code being input by a user of the print control apparatus via a second operation unit;

a second code conversion unit adapted to convert the received second personal identification code by using a predetermined function;

a judgment unit adapted to judge whether or not the first personal identification code converted by said first code conversion unit is the same as the second personal identification code converted by said second code conversion unit;

a random number decryption unit adapted to, in a case where said judgment unit judges that the converted first and second personal identification codes are the same, decrypt the encrypted random number by using the second personal identification code or the converted second personal identification code as a decryption key; and

a print data decryption unit adapted to, in the case where said judgment unit judges that the converted first and second personal identification codes are the same, decrypt the encrypted print data by using the decrypted random number as a decryption key.

10. (Original) A print control system according to Claim 9, wherein said print control apparatus further comprises a print processing unit adapted to execute a print process of the decrypted print data.

11. (Previously Presented) An information processing method comprising the steps of:

receiving a personal identification code, the personal identification code being input by a user of an information processing apparatus via an operation unit;

generating a random number;

converting the received personal identification code by using a predetermined function;

encrypting the generated random number by using the personal identification code or the converted personal identification code as an encryption key;

encrypting print data by using the random number as an encryption key; and

transmitting the encrypted random number, the converted personal identification code and the encrypted print data to a print control apparatus via a network.

12. (Original) An information processing method according to Claim 11, further comprising the step of transmitting the encrypted random number, the converted personal identification code and the encrypted print data.

13. (Withdrawn) A print control method comprising the steps of:

receiving an encrypted random number, a first personal identification code subjected to predetermined conversion, and encrypted print data;

receiving a second personal identification code input by a user;

converting the received second personal identification code by using a predetermined function;

judging whether or not the converted first personal identification code is the same as the converted second personal identification code;

in a case where it is judged that the converted first and second personal identification codes are the same, decrypting the encrypted random number by using the second personal

identification code or a key based on the second personal identification code as a decryption key;
and

in the case where it is judged that the converted first and second personal identification codes are the same, decrypting the encrypted print data by using the decrypted random number as a decryption key.

14. (Withdrawn) A print control method according to Claim 13, further comprising the step of executing a print process of the decrypted print data.

15-16. (Canceled)

17. (Previously Presented) A computer-readable storage medium which stores a computer program for causing a computer to execute an information processing method, said computer program comprising:

a code reception module for receiving a personal identification code, the personal identification code being input by a user of an information processing apparatus via an operation unit;

a random number generation module for generating a random number;

a code conversion module adapted to convert the received personal identification code by using a predetermined function;

a random number encryption module for encrypting the generated random number by using the personal identification code or the converted personal identification code as an encryption key;

a print data encryption module for encrypting print data by using the random number as an encryption key; and

a transmission module adapted to transmit the encrypted random number, the converted personal identification code and the encrypted print data to a print control apparatus via a network.

18. (Withdrawn) A computer-readable storage medium which stores a computer program for causing a computer to execute a print control method, said computer program comprising:

a reception module for receiving an encrypted random number, a first personal identification code subjected to predetermined conversion, and encrypted print data;

a code reception module for receiving a second personal identification code input by a user;

a code conversion module for converting the received second personal identification code by using a predetermined function;

a judgment module for judging whether or not the converted first personal identification code is the same as the converted second personal identification code;

a random number decryption module for, in a case where it is judged that the converted first and second personal identification codes are the same, decrypting the encrypted random number by using the second personal identification code or a key based on the second personal identification code as a decryption key; and

a print data decryption module for, in the case where it is judged that the converted first and second personal identification codes are the same, decrypting the encrypted print data by using the decrypted random number as a decryption key.